6712-01

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 2 and 90

[PS Docket No. 13-87; PS Docket No. 06-229, WT Docket No. 96-86, RM-11433 and RM-11577, FCC 14-172]

Service Rules Governing Narrowband Operations in the 769-775/799-805 MHz Bands

AGENCY: Federal Communications Commission.

ACTION: Final rule.

SUMMARY: In this document the Commission implements certain changes to the rules governing the 700 MHz public safety narrowband spectrum (769-775/799-805 MHz). We eliminate the requirement for licensees to narrowband to 6.25 kHz technology by December 2016, thereby enabling licensees to extend the life of existing systems and providing public safety with greater flexibility in determining the optimal future use of the band. In addition, we revise and update the technical rules for the band to enhance interoperability and open up certain channels to new uses, and we release reserve spectrum to provide additional capacity, particularly for public safety licensees relocating to the 700 MHz band from the T-Band (470-512 MHz). These rule changes enhance the ability of public safety licensees to use this spectrum to protect the safety of life and property.

DATES: Effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], except for the amendments to 47 CFR 2.1033(c)(20), 90.531(b)(2), and 90.531(b)(7), containing new or modified information collection requirements that require approval by the Office of Management and Budget under the Paperwork Reduction Act of 1995, which will be effective after such approval on the effective date specified in a notification the Commission will publish in the Federal Register.

FOR FURTHER INFORMATION CONTACT: Brian Marenco, Policy and Licensing Division, Public Safety and Homeland Security Bureau, (202) 418-0838.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Report and Order in PS Docket No. 13-87, FCC 14-172, released on October 24, 2014. The document is available for download at http://fjallfoss.fcc.gov/edocs_public/. The complete text of this document is also available for inspection and copying during normal business hours in the FCC Reference Information Center, Portals II, 445 12th Street, SW., Room CY-A257, Washington, DC 20554. To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to FCC504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

In 2013, the Commission's Notice of Proposed Rulemaking (NPRM) sought comment on several proposals to amend the 700 MHz public safety narrowband rules. First, the Commission asked whether it should extend or eliminate the December 31, 2016 narrowbanding deadline for 700 MHz public safety narrowband licensees. Next, it sought comment on a 2010 National Public Safety Telecommunications Council (NPSTC) proposal to designate certain 700 MHz narrowband channels for low-altitude, low power, air-ground voice communications. Finally, it sought comment on other NPSTC proposals made in an earlier 2008 petition and matters raised on the Commission's own motion.

In the Report and Order the Commission eliminates the December 31, 2016 narrowbanding deadline for 700 MHz public safety narrowband licensees to transition from 12.5 kilohertz to 6.25 kilohertz channel bandwidth technology. The Commission also re-designates channels in the 700 MHz band that are currently licensed for secondary trunking operations for public safety aircraft voice operations, consistent with NPSTC's 2010 proposal. The Commission reallocates the Reserve Channels to General Use Channels and affords T-Band public safety licensees priority for licensing of the former Reserve Channels in T-Band areas. The Commission also addresses NPSTC's proposals and technical matters raised in the NPRM. As a

result of our decision to eliminate the 700 MHz narrowbanding deadline and designate the Reserve Spectrum for General Use, we dismiss as moot several requests for waiver filed prior to and during the pendency of this rulemaking.

Procedural Matters

A. Final Regulatory Flexibility Analysis

The Final Regulatory Flexibility Analysis required by section 604 of the Regulatory Flexibility Act, 5 U.S.C. 604, is included in Appendix A of the Report and Order.

B. Paperwork Reduction Act of 1995 Analysis

The Report and Order document contains new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new information collection requirements contained in this proceeding.

Final Regulatory Flexibility Analysis

As required by the Regulatory Flexibility Act (RFA), an Initial Regulatory Flexibility

Analysis (IRFA) was incorporated into the NPRM of this proceeding. The Commission sought

written public comment on the IRFA. The RFA requires that an agency prepare a regulatory

flexibility analysis for notice-and-comment rulemaking proceedings, unless the agency certifies

that "the rule will not, if promulgated, have a significant economic impact on a substantial

number of small entities." The RFA generally defines "small entity" as having the same meaning

as the terms "small business," "small organization," and "small governmental jurisdiction." In

addition, the term "small business" has the same meaning as the term "small business concern"

under the Small Business Act. A "small business concern" is one which: (1) is independently

owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional

criteria established by the Small Business Administration (SBA). The present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

A. Need for, and Objectives of, the Proposed Rules

- 1. In the Report and Order, we amend the Commission's rules governing 700 MHz public safety narrowband spectrum at 769-775 MHz and 799-805 MHz. The rule changes adopted are intended to promote flexible and efficient use of public safety narrowband spectrum in the 700 MHz band while reducing the regulatory burdens on licensees wherever possible. In order to achieve these objectives, we:
 - Eliminate the December 31, 2016 narrowbanding deadline for 700 MHz
 public safety narrowband licensees to transition from 12.5 kilohertz to
 6.25 kilohertz channel bandwidth technology.
 - Redesignate channels in the 700 MHz band that are currently licensed for secondary trunking operations for public safety aircraft voice operations, at a maximum ERP of 2 watts, consistent with NPSTC's 2010 proposal.
 - Decline to establish a Nationwide Interoperability Travel Channel.
 - Allow voice operations on Data Interoperability Channels on a secondary basis.
 - Reallocate the Reserve Channels to General Use Channels and afford T-Band public safety licensees priority for licensing of the former Reserve Channels in T-Band areas.
 - Decline to increase the permissible 2 watt ERP for radios operating on the mobile-only low power channels.

- Encourage manufacturers to demonstrate compliance with § 90.548 of the Commission's rules (Interoperability Technical Standards) by submitting evidence of Compliance Assessment Program (CAP) approval.

 Alternatively, manufacturers may provide a document demonstrating how they determined that their devices are interoperable across vendors and meet § 90.548 requirements.
- Adopt rules governing the spectral output of signal boosters when simultaneously retransmitting multiple signals.
- Adopt effective radiated power (ERP) as a regulatory parameter in place of transmitter power output (TPO).
- Recommend, but do not require, that 700 MHz radios operating on interoperability calling channels employ the Network Access Code (NAC) \$293.
- Clarify that 700 MHz radios must be capable of being programmed for all
 64 interoperability channels, but that all 64 channels need not be
 immediately accessible to the user.
- Clarify that the rules do not allow analog operation on the 700 MHz interoperability channels.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

1. There were no comments filed that specifically addressed the rules and policies proposed in the IRFA.

- C. Description and Estimate of the Number of Small Entities to Which the Rules Will

 Apply
- 2. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted. The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.
- 3. Public Safety Radio Licensees. As a general matter, Public Safety Radio Licensees include police, fire, local government, forestry conservation, highway maintenance, and emergency medical services. For the purpose of determining whether a Public Safety Radio Licensee is a small business as defined by the SBA, we use the broad census category, Wireless Telecommunications Carriers (except Satellite). This definition provides that a small entity is any such entity employing no more than 1,500 persons. The Commission does not require Public Safety Radio Licensees to disclose information about number of employees, so the Commission does not have information that could be used to determine how many Public Safety Radio licensees constitute small entities under this definition.
- 4. Radio and Television Broadcasting and Wireless Communications Equipment

 Manufacturing. The Census Bureau defines this category as follows: "This industry comprises
 establishments primarily engaged in manufacturing radio and television broadcast and wireless
 communications equipment. Examples of products made by these establishments are:
 transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular
 phones, mobile communications equipment, and radio and television studio and broadcasting

equipment." The SBA has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, which is: all such firms having 750 or fewer employees. According to Census Bureau data for 2007, there were a total of 939 establishments in this category that operated for part or all of the entire year. According to Census bureau data for 2007, there were a total of 919 firms in this category that operated for the entire year. Of this total, 771 had fewer than 100 employees and 148 had more than 100 employees. Thus, under that size standard, the majority of firms can be considered small.

D. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements

2. This Report and Order adopts a rule that will entail reporting, recordkeeping, and/or third-party consultation. Specifically, the Report and Order requires all Wireless Communications Equipment Manufacturers that manufacture 700 MHz narrowband equipment capable of operating on the interoperability channels to demonstrate compliance with the Commission's Interoperability Technical Standards. One method of demonstrating this compliance is demonstrating compliance with the Project 25 Compliance Assessment Program (CAP). CAP is a program that establishes an independent compliance assessment process to ensure that communications equipment conforms to Project 25 standards and is interoperable across vendors. The purpose of this rule is to enhance interoperability and provide assurance to licensees that their equipment is interoperable across vendors regardless of which vendor they choose. Thus, the Report and Order establishes the presumption that CAP compliance is sufficient to show compliance with § 90.548. Alternatively, a manufacturer may submit a document describing how it determined compliance with Section 90.548 and that its equipment is interoperable across vendors. The Report and Order concludes this is the most effective means of ensuring licensee adherence with § 90.548 of our rules. The estimated burden and cost levels for

equipment certification are described in more detail in the supporting statement for OMB Control No. 3060-0057.

- 3. This Report and Order designates the twenty-four 12.5 kilohertz bandwidth reserve channel pairs for General Use subject to the approved regional planning committee regional plans. To date, only 47 out of 55 regions have obtained approval for their plans. As a result, we direct these 47 700 MHz regional planning committees that have obtained approval for their regional plans to modify their plans to reflect the new 700 MHz narrowband General Use reserve spectrum allocation adopted in this Report and Order. Therefore, these 47 regions will incur a one-time burden as they implement the final rule. Similarly, we estimate that each of the 55 regional planning committees will receive information on how to incorporate the reserve channels into their plans from approximately 20 eligible entities, so that the total number of third party respondents is estimated to be approximately 1100. The estimated burden and cost levels are described in more detail in the supporting statement for OMB 3060-0805, ICR Ref No. 201103-3060-001.
- 4. This Report and Order designates the twenty-four 12.5 kilohertz bandwidth reserve channel pairs for General Use subject to the approved regional planning committees' regional plans. Each applicant for General Use Reserve Spectrum shall notify the relevant Regional Planning Committee(s) prior to filing a license application with the Commission and allow the Regional Planning Committee the opportunity to review the application and prepare a statement of concurrence. Any statement of concurrence from the Regional Planning Committee shall be submitted with the applicant's license application. Therefore, these licensees and regional planning committees will incur a one-time burden each time an application is filed with the Commission. The estimated burden and cost levels are described in more detail in the supporting statement for OMB 3060-1198, ICR Ref. No. 201404-3060-023. Additionally, T-

Band incumbents that seek to license the Reserve Channels must commit to return to the Commission an equal amount of T-Band spectrum.

- 5. This Report and Order redesignates the Secondary Trunking Channels to support Air-Ground communications subject to State administration. We assign responsibility for coordinating these channels to the states. Each applicant for Air-Ground spectrum shall notify the relevant State prior to filing a license application with the Commission and allow the State the opportunity to review the application and prepare a statement of concurrence. Any statement of concurrence from the State shall be submitted with the applicant's license application.
- 6. This Report and Order amends the rules to require radios to be capable of being programmed to operate on any of the sixty-four 6.25 kilohertz bandwidth interoperability channels in the 700 MHz band. All 64 channels, however, need not be immediately available to the user. This rule change eliminates an ambiguity in the rules and reduces the compliance requirements for public safety licensees.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities and Significant Alternatives Considered

- 5. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its approach, which may include the following four alternatives (among others):

 (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.
- 6. The Report and Order adopts a number of changes to the rules covering operation of public safety systems on narrowband spectrum in the 700 MHz band. In formulating rule changes in the Report and Order, we strived to promote efficient use of the 700 MHz public

safety narrowband spectrum while reducing economic burdens on Public Safety Radio Licensees.

Absent these rule changes, we conclude that Public Safety Radio Licensees would be subject to increased economic burdens and unnecessary restrictions.

- 7. Deadline for Narrowbanding Transition to 6.25 Kilohertz Technology. The Report and Order eliminates the December 31, 2016 deadline for 700 MHz public safety narrowband licensees to transition to 6.25 kHz bandwidth technology and the December 31, 2014 interim deadline for the cessation of marketing, manufacture, or import of 700 MHz narrowband equipment not capable of operating at 6.25 kilohertz efficiency. Elimination of the 2016 deadline relieves public safety licensees of the economic burden associated with having to replace currently operating communications systems prior to the end of their life-cycle. Elimination of the 2014 deadline allows for the development of industry standards for 6.25 kHz technology which will allow equipment manufacturers to develop equipment designed for interoperability among equipment of all manufacturers as opposed to equipment that can only communicate with a limited number of vendors' equipment.
- 8. <u>Air-Ground Communications on Secondary Trunking Channels</u>. The Report and Order re-designates the secondary trunking channels for air-ground communications to be used by low altitude aircraft and ground based stations. The Report and Order concludes there is a need to designate specific channels in the band for use by low-altitude aircraft and that secondary trunking channels are no longer used for their original purpose. Thus, public safety licensees benefit from this rule change because channels in the band which previously remained fallow become available for the increasingly important function of allowing aircraft responding to emergencies to interoperate with public safety officials on the ground.
- 9. <u>Nationwide Interoperability Travel Channel</u>. The Report and Order declines to redesignate one of the 12.5 kilohertz bandwidth nationwide calling channel pairs as a Nationwide Interoperability Travel Channel. The Report and Order concludes that the adverse impact of

reducing the overall channel capacity devoted to nationwide calling interoperability outweighs any potential benefit to public safety licensees of designating a nationwide travel channel.

- 10. <u>Voice Communications on Data Interoperability Channels</u>. The Report and Order permits voice communications on a secondary basis on both of the two 12.5 kilohertz bandwidth data-only interoperability channels. This rule change benefits public safety licensees by providing them the flexibility to use additional channels for voice interoperability in jurisdictions that only have limited if any demand for data interoperability.
- 11. Reserve Channels. The Report and Order designates all twenty four 12.5 kilohertz bandwidth Reserve Channel pairs for General Use subject to approved regional planning committee regional plans. The Reserve Channels had been held in reserve to address public safety's developing needs. To further Congress' goal to facilitate relocation of public safety incumbents in the 470-512 MHz T-band, the Report and Order provides priority access to all twenty four 12.5 kilohertz channel pairs for T-Band relocation in the urban areas specified in Section 90.303 of the Commission's rules. Outside the urban areas specified by Section 90.303, the Report and Order permits approved regional planning committees to designate up to eight 12.5 kilohertz channel pairs for temporary deployable trunked use and the rest for General Use, including low power vehicular repeater operation. This approach affords public safety agencies with flexibility in operation on the former Reserve Channels while also avoiding undue economic burdens.
- 12. <u>Power Limit for Low Power Channels</u>. The Report and Order declines to increase the power limit on the low power channels from two to twenty watts effective radiated power (ERP). The Report and Order concludes public safety licensees would benefit from retaining these channels for their original intended purpose of providing first responders with on-scene low-power communications. The Report and Order instructs licensees needing additional transmit

power in order to communicate over large distances or to penetrate RF-resistant buildings to consider the numerous full power narrowband channels available in the band.

- 13. Compliance with Interoperability Technical Standards. The Report and Order requires equipment manufacturers to demonstrate compliance with the requisite Interoperability Technical Standards as a condition for equipment certification. This will provide a benefit to public safety licensees by ensuring that only equipment that has been tested for trunked and conventional interoperability in a vendor-neutral environment can be marketed. This will provide the additional benefit of engendering competition in the public safety equipment marketplace by eliminating system compatibility as a gating factor when evaluating equipment purchases. We have attempted to reduce the burden on equipment manufacturers by allowing them to meet this standard by demonstrating compliance with the Project 25 Compliance Assessment Program. Compliance with this program is already a requisite for grant eligibility and agency purchasing standards and thus we feel that any new burden imposed by this requirement would be minimal. Alternatively, manufacturers may demonstrate, independent of the CAP Program, that their equipment is interoperable with that of other manufacturers.
- ACP Requirements for Class B Signal Boosters. The Report and Order exempts Class B signal boosters from the ACP limits of § 90.543(a), but only when such units are simultaneously retransmitting multiple signals. In lieu of the ACP limits, the Report and Order applies the emission limit listed in § 90.543(c) applicable to Class B signal boosters operating in this manner. Wireless Communications Equipment Manufacturers that produce Class B signal boosters benefit from this exemption because they will be able to continue manufacturing and marketing signal boosters capable of operating on 700 MHz public safety narrowband spectrum. Public safety licensees benefit from this exemption because they will continue to have access to signal boosters capable of providing in-building RF coverage in this band. Absent this exemption, public safety licensees may have been unable to find solutions for deficiencies in in-building RF coverage.

- 15. Narrowband Power Limits. The Report and Order converts all power limits from transmitter output power (TPO) to effective radiated power (ERP) and consolidates all power limits into a more comprehensive Section 90.541. The Report and Order also deletes § 90.545 in its entirety because full power TV and DTV stations no longer occupy the band. Thus, this rule section is no longer necessary. Public safety licensees benefit from this update because all power limits will now be in terms of ERP which more accurately defines the actual operating power of the radio and is therefore more suitable for services—such as 700 MHz public safety narrowband operations—which are subject to licensing and frequency coordination.
- 16. <u>Interoperability Network Access Code</u>. The Report and Order declines to specify a standardized Network Access Code (NAC) by rule for operation on the 700 MHz interoperability channels. The NAC is a pre-programmed digital address in a Project 25 radio which allows the radio to "hear" only communications directed to that address from another radio. The <u>Report and Order</u> concludes that the choice of a NAC for interoperability channels is best left to regional, state and local public safety agencies to address according to their operational security and organizational needs. This approach affords public safety flexibility in programming radios while avoiding undue economic burdens.
- 17. <u>User Access to Interoperability Channels</u>. The Report and Order clarifies that Commission rules require only that radios be capable of being programmed to operate on any of the interoperability channels, but do not require that all 64 interoperability channels be selectable by the user. This approach affords public safety flexibility in programming radios while avoiding undue economic burdens.
- 18. <u>Analog Operation on the Interoperability Channels.</u> The Report and Order declines to permit users to operate their mobile and portable equipment in analog mode on the interoperability channels. In reaching this decision, the Report and Order concludes that allowing

two modulation modes on a channel reserved for interoperable voice communications would seriously impair interoperability.

- F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules
- 19. None.
- **G.** Report to Congress
- 20. The Commission will send a copy of the Report and Order, including the FRFA, in a report to be sent to Congress pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996. In addition, the Commission will send a copy of the Report and Order, including this FRFA, to the Chief Counsel for Advocacy of the Small Business Administration.

Ordering Clauses

21. Accordingly, **IT IS ORDERED** that, pursuant to sections 1, 4(i), 303, 316, 332 and 337 of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154(i), 303, 316, 332 and 337, the Report and Order **IS HEREBY ADOPTED**.

IT IS FURTHER ORDERED that the amendments of the Commission's rules as set forth in Appendix B of the Report and Order ARE ADOPTED, effective [INSERT 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], except for those rules and requirements in §§ 2.1033(c)(20), 90.531(b)(2) and 90.531(b)(7), 47 CFR 2.1033(c)(20), 90.531(b)(2) and 90.531(b)(7), containing new or modified information collection requirements that require approval by the Office of Management and Budget under the Paperwork Reduction Act of 1995, which WILL BECOME EFFECTIVE after such approval, on the effective date specified in a notice that the Commission publishes in the Federal Register announcing such approval and effective date.

22. IT IS FURTHER ORDERED that, pursuant to section 4(i) of the

Communications Act of 1934, as amended, 47 U.S.C. 154(i), and § 1.925(b)(3) of the Commission's rules, 47 CFR 1.925(b)(3), the Request for Waiver filed by the Washington Metropolitan Area Transit Authority on June 18, 2013, IS DISMISSED AS MOOT.

- 23. IT IS FURTHER ORDERED that, pursuant to section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), and section 1.925(b)(3) of the Commission's rules, 47 CFR 1.925(b)(3), the Request for Waiver filed by the Los Angeles Regional Interoperable Communications System Joint Powers Authority on December 7, 2012, IS DISMISSED AS MOOT.
- 24. IT IS FURTHER ORDERED that, pursuant to section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), and § 1.925(b)(3) of the Commission's rules, 47 CFR 1.925(b)(3), the Request for Waiver filed by Central Maryland Area Radio Communications (CMARC) on April 3, 2013, IS DISMISSED AS MOOT.
- 25. IT IS FURTHER ORDERED that, pursuant to section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), and § 1.925(b)(3) of the Commission's rules, 47 CFR 1.925(b)(3), the Request for Waiver and Request for Expedited Review and Action for Rulemaking filed by Weld County, Colorado on February 14, 2013, IS DISMISSED AS MOOT.
- 26. IT IS FURTHER ORDERED that, pursuant to section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), and section 1.925(b)(3) of the Commission's rules, 47 CFR 1.925(b)(3), the Request for Waiver and Request for Expedited Review and Action for Rulemaking filed by the Region 12, 700 MHz Regional Planning Committee and the State of Idaho Statewide Interoperability Executive Council on February 8, 2013, IS DISMISSED AS MOOT.
 - 27. IT IS FURTHER ORDERED that, pursuant to section 4(i) of the

Communications Act of 1934, as amended, 47 U.S.C. 154(i), and section 1.925(b)(3) of the Commission's rules, 47 CFR 1.925(b)(3), the Request for Waiver and Request for Expedited Review and Action for Rulemaking filed by the City of Pueblo, Colorado on December 12, 2012, IS DISMISSED AS MOOT.

- 28. IT IS FURTHER ORDERED that, pursuant to section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), and section 1.925(b)(3) of the Commission's rules, 47 CFR 1.925(b)(3), the Request for Waiver and Request for Expedited Review and Action for Rulemaking filed by the County of Douglas, Colorado on December 12, 2012, IS DISMISSED AS MOOT.
- 29. IT IS FURTHER ORDERED that, pursuant to section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), and section 1.925(b)(3) of the Commission's rules, 47 CFR 1.925(b)(3), the Request for Waiver and Request for Expedited Review and Action for Rulemaking filed by the City of Thornton, Colorado on December 5, 2012, IS DISMISSED AS MOOT.
- 30. IT IS FURTHER ORDERED that, pursuant to section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), and section 1.925(b)(3) of the Commission's rules, 47 CFR 1.925(b)(3), the Request for Waiver and Request for Expedited Review and Action for Rulemaking filed by the Adams County Communications Center, Inc., Colorado on November 29, 2012, IS DISMISSED AS MOOT.
- 31. IT IS FURTHER ORDERED that, pursuant to section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), and section 1.925(b)(3) of the Commission's rules, 47 CFR 1.925(b)(3), the Petition for Waiver filed by the State of Maryland on December 12, 2013, IS DISMISSED AS MOOT.

32. IT IS FURTHER ORDERED that the Commission SHALL SEND a copy of the
Report and Order in a report to be sent to Congress and the General Accounting Office pursuant
to the Congressional Review Act, 5 U.S.C. 801(a)(1)(A).
List of Subjects
47 CFR Part 2
Radio
47 CFR Part 90
Radio.
FEDERAL COMMUNICATIONS COMMISSION.

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR parts 2 and 90 as follows:

PART 2— FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

1. The authority citation for part 2 continues to read as follows:

Authority: 47 U.S.C. 154, 302, 303, 307, 336, and 337, unless otherwise noted.

2. Section 2.1033 is amended by adding paragraph (c)(20) to read as follows:

§2.1033 Application for certification.

* * * * *

(c) * * *

(20) Applications for certification of equipment operating under part 90 of this chapter and capable of operating on the 700 MHz interoperability channels (See § 90.531(b)(1) of this chapter) shall include a Compliance Assessment Program Supplier's Declaration of Conformity and Summary Test Report or, alternatively, shall include a document detailing how the applicant determined that its equipment complies with § 90.548 of this chapter and that the equipment is interoperable across vendors.

* * * * *

PART 90—PRIVATE LAND MOBILE RADIO SERVICES

3. The authority citation for part 90 continues to read as follows:

Authority: Sections 4(i), 11, 303(g), 303(r) and 332(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 161, 303(g), 303(r) and 332(c)(7).

4. Section 90.203 is amended by revising paragraph (m) and removing and reserving paragraph (n).

The revision reads as follows:

§ 90.203 Certification Required.

* * * * *

(m) Applications for part 90 certification of transmitters designed to operate in in 769-775 MHz and 799-805 MHz frequency bands will only be granted to transmitters meeting the modulation, spectrum usage efficiency and channel capability requirements listed in §§ 90.535, 90.547, and 90.548.

* * * * *

5 Section 90.531 is amended by revising paragraphs (b)(1)(i) and (iii), (b)(2), and (b)(6) and (7) to read as follows:

§ 90.531 Band plan.

* * * * *

- (b) * * *
- (1) * * *
- (i) <u>Narrowband data Interoperability channels</u>. The following channel pairs are reserved nationwide for data transmission on a primary basis: 279/1239, 280/1240, 921/1881, and 922/1882. Voice operations are permitted on these channels on a secondary basis.

* * * * *

(iii) Narrowband trunking Interoperability channels. The following

Interoperability channel pairs may be used in trunked mode on a secondary basis to

conventional Interoperability operations: 23/983, 24/984, 103/1063, 104/1064, 183/1143, 184/1144, 263/1223, 264/1224, 657/1617, 658/1618, 737/1697, 738/1698, 817/1777, 818/1778, 897/1857, 898/1858. For every ten general use channels trunked at a station, entities may obtain a license to operate in the trunked mode on two of the above contiguous Interoperability channel pairs. The maximum number of Interoperability channel pairs that can be trunked at any one location is eight.

- (2) Narrowband General Use Reserve channels. The following narrowband channels are designated for General Use subject to Commission approved regional planning committee regional plans and technical rules applicable to General Use channels: 37, 38, 61, 62, 77, 78, 117, 118, 141, 142, 157, 158, 197, 198, 221, 222, 237, 238, 277, 278, 301, 302, 317, 318, 643, 644, 683, 684, 699, 700, 723, 724, 763, 764, 779, 780, 803, 804, 843, 844, 859, 860, 883, 884, 923, 924, 939, 940, 997, 998, 1021, 1022, 1037, 1038, 1077, 1078, 1101, 1102, 1117, 1118, 1157, 1158, 1181, 1182, 1197, 1198, 1237, 1238, 1261, 1262, 1277, 1278, 1603, 1604, 1643, 1644, 1659, 1660, 1683, 1684, 1723, 1724, 1739, 1740, 1763, 1764, 1803, 1804, 1819, 1820, 1843, 1844, 1883, 1884, 1899, 1900.
- (i) <u>T-Band Relocation</u>. The narrowband channels established in paragraph (b)(2) are designated for priority access by public safety incumbents relocating from the 470-512 MHz band in the urban areas specified in §§ 90.303 and 90.305 of the Commission's rules provided that such incumbent commits to return to the Commission an equal amount of T-Band spectrum and obtains concurrence from the relevant regional planning committee(s). Public safety T-Band incumbents shall enjoy priority access for a five year period starting from the date the Public Safety

and Homeland Security Bureau releases a public notice announcing the availability of Reserve Channels for licensing.

- (ii) <u>Deployable Trunked Systems</u>. Outside the urban areas specified in §§ 90.303 and 90.305 of the Commission's rules, the 700 MHz Regional Planning Committees may designate no more than eight 12.5 kilohertz channel pairs for temporary deployable mobile trunked infrastructure (F2BT) that could be transported into an incident area to assist with emergency response and recovery.
- (iii) <u>General Use</u>. Outside the urban areas specified in §§ 90.303 and 90.305 of the Commission's rules, the 700 MHz Regional Planning Committees may designate sixteen to twenty four 12.5 kilohertz channel pairs for General Use, including low power vehicular mobile repeaters (MO3).

* * * * *

- (6) Narrowband general use channels. All narrowband channels established in this paragraph (b), other than those listed in paragraphs (b)(1), (b)(4), (b)(5), and (b)(7) of this section are reserved to public safety eligibles subject to Commission approved regional planning committee regional plans. Voice operations on these channels are subject to compliance with the spectrum usage efficiency requirements set forth in § 90.535(d).
- (7) <u>Air-ground channels</u>. The following channels are reserved for air-ground communications to be used by low-altitude aircraft and ground based stations: 21/981, 22/982, 101/1061, 102/1062, 181/1141, 182/1142, 261/1221, 262/1222, 659/1619, 660/1620, 739/1699, 740/1700, 819/1779, 820/1780, 899/1859, and 900/1860.

- (i) Airborne use of these channels is limited to aircraft flying at or below 457 meters (1500 feet) above ground level.
- (ii) Aircraft are limited to 2 watts effective radiated power (ERP) when transmitting while airborne on these channels.
- (iii) Aircraft may transmit on either the mobile or base transmit side of the channel pair.
- (iv) States are responsible for the administration of these channels.
- 6. Section 90.535 is amended by revising paragraph (a) and paragraph (d) introductory text to read as follows.

§ 90.535 Modulation and spectrum usage efficiency requirements.

* * * * *

(a) All transmitters in the 769-775 MHz and 799-805 MHz frequency bands must use digital modulation. Mobile and portable transmitters may have analog modulation capability only as a secondary mode in addition to its primary digital mode except on the interoperability channels listed in § 90.531(b)(1). Analog modulation is prohibited on the interoperability channels. Mobile and portable transmitters that only operate on the low power channels designated in § 90.531(b)(3) and (4) are exempt from this digital modulation requirement.

* * * * *

(d) Transmitters designed to operate on the channels listed in paragraphs § 90.531(b)(2), (b)(5), (b)(6), and (b)(7) must be capable of operating in the voice mode at an efficiency of at least one voice path per 12.5 kHz of spectrum bandwidth.

* * * * *

7. Revise §90.541 to read as follows:

§ 90.541 Transmitting power and antenna height limits.

The transmitting power and antenna height of base, mobile, portable and control stations operating in the 769-775 MHz and 799-805 MHz frequency bands must not exceed the maximum limits in this section. Power limits are listed in effective radiated power (ERP).

- (a) The transmitting power and antenna height of base stations must not exceed the limits given in paragraph (a) of § 90.635.
 - (b) The transmitting power of a control station must not exceed 200 watts ERP.
 - (c) The transmitting power of a mobile unit must not exceed 100 watts ERP.
- (d) The transmitting power of a portable (hand-held) unit must not exceed 3 watts ERP.
- (e) Transmitters operating on the narrowband low power channels listed in § 90.531(b)(3) and (4), must not exceed 2 watts ERP.
- 8. Section 90.543 is amended by revising the introductory text to read as follows:

§ 90.543 Emission limitations.

Transmitters designed to operate in 769-775 MHz and 799-805 MHz frequency bands must meet the emission limitations in paragraphs (a) through (d) of this section. Class A and Class B signal boosters retransmitting signals in the 769-775 MHz and 799-805 MHz frequency bands are exempt from the limits listed in paragraph (a) of this section when simultaneously retransmitting multiple signals and instead shall be subject to the limit listed in paragraph (c) of this section when operating in this

manner. Transmitters operating in 758-768 MHz and 788-798 MHz bands must meet the emission limitations in (e) of this section.

* * * * *

§ 90.545 [Removed]

- 9. Remove § 90.545.
- 10. Section 90.547 is amended by revising paragraph (a) introductory text to read as follows:

§ 90.547 Narrowband Interoperability channel capability requirement.

(a) Except as noted in this section, mobile and portable transmitters operating on narrowband channels in the 769-775 MHz and 799-805 MHz frequency bands must be capable of being programmed to operate on all of the designated nationwide narrowband Interoperability channels pursuant to the standards specified in this part.

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11. Section 90.548 is amended by adding paragraph (c) to read as follows:

§ 90.548 Interoperability Technical Standards.

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(c) Equipment certified by the P25 Compliance Assessment Program is presumed to comply with this section.

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